ACCESSION NUMBER:

1998:608601

DOCUMENT NUMBER:

129:216521

TITLE:

Preparation of 1-isoquinolinone-3-carboxylates

as PDE V inhibitors

INVENTOR(S):

Ukita, Tatsuzo; Omori, Kenji; Ikeo, Tomihiro

PATENT ASSIGNEE(S):

Tanabe Seiyaku Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 299 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.				. KIND			DATE		APPLICATION NO.						DATE	
					A1			19980903		WO 1998-JP715							
																1998	
-																0223	
		W:			•			BA,	-	•		•			•		
								FI, LC,									
			•	•	•	•	•	NZ,		•	,			•	•	•	
						-	-	TT,								•	
								RU,			ω,	02,	V14,	10,	Д и ,	ALI,	
		RW:	•	•			•	SD,	•		ZW.	АТ.	BE.	CH.	DE.	DK.	
								IE,									
								GN,							•	,	
	ΑU	9862	300			A1		1998	0918		AU 1	998-	6230	0			
		•			•							•				1998	•
										•						0223	
	JP	1029	8164			A2		1998	1110		JP 1	998-	4413	9			
																1998	
																0226	
PRIO	RIT	APP	LN.	INFO	. :						JP 1	997-	4440	8	- 1	A	
																1997	
																0227	
											WO 1	998-	TP71	5	1	W	
														-		1998	
										• •						0223	

OTHER SOURCE(S):

MARPAT 129:216521

GI

Title compds. [I; R = H or substituent(s); R1 = H, NH2, AΒ (cyclo)alkyl, heterocyclyl, aryl, etc.; R2 = (esterified) CO2H, CONH2, N-attached heterocyclylcarbonyl, etc.; R3 = (un)substituted Ph] were prepared as PDE V inhibitors (no data). Thus, 5-benzyloxy-4-methoxy-2-(3,4,5-trimethoxybenzoyl)benzoic acid was cyclocondensed with CH2 (CO2CMe3)2 and the hydrated product cyclocondensed with 4-(H2N)C6H4NHCO2CMe3 to give, in 4 addnl. steps, title compound II [R1 = C6H4 (NH2)-4, R3 = C6H2 (OMe) 3-3,4,5, R4 = 2-pyridylmethoxy].

IT 212498-74-3P 212499-20-2P 212499-85-9P 212500-32-8P 212500-49-7P 212500-73-7P

(preparation of 1-isoquinolinone-3-carboxylates as PDE V inhibitors)

RN 212498-74-3 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c|c} \text{OMe} \\ \text{MeO} & \text{OMe} \\ \\ \text{H}_2\text{N} & \text{OMe} \\ \\ \text{O} & \text{CH}_2 \\ \\ \text{NH}_2 \\ \end{array}$$

PAGE 2-A

●3 HCl

RN 212499-20-2 HCAPLUS
CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

$$MeO$$
 MeO
 OMe
 OMe

PAGE 2-A

●3 HCl

RN 212499-85-9 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c|c} & \text{MeO} & \text{OMe} \\ & \text{H}_2\text{N} & \text{O-CH}_2 \\ & \text{O} & \text{NH}_2 \\ \end{array}$$

PAGE 2-A

●3 HCl

RN 212500-32-8 HCAPLUS

CN

3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{MeO} \\ \text{OMe} \\ \text{OMe} \\ \text{O} \\ \text{OCH}_2 \\ \text{NH}_2 \\ \\ \text{NH}_2 \\ \end{array}$$

RN 212500-49-7 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} \\ \text{MeO} & \text{OMe} \\ \\ \text{N} & \text{O} \\ \\ \text{O} & \text{CH}_2 \\ \\ \text{NH}_2 \\ \end{array}$$

RN 212500-73-7 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{MeO} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{NH}_2 \\ \text{NH}_2 \\ \text{O} \\$$

IC ICM C07D217-26
 ICS A61K031-47; C07D401-12; C07D409-12; C07D401-04; C07D401-06;